

## Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

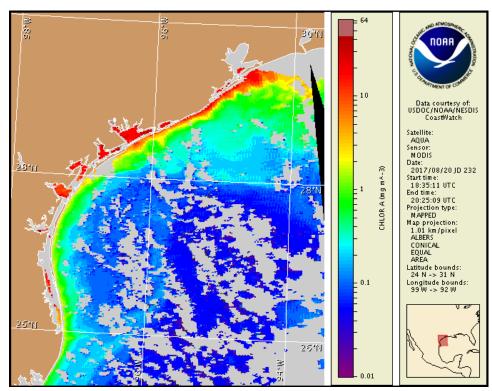
Monday, 21 August 2017

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, August 14, 2017



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from August 11 to 18: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

https://tidesandcurrents.noaa.gov/hab/hab\_publication/GOMX\_HAB\_Bulletin\_Guide.pdf

Detailed sample information can be obtained through the Texas Parks and Wildlife Department at: http://www.tpwd.state.tx.us./landwater/water/environconcerns/hab/redtide/status.phtml

https://tidesandcurrents.noaa.gov/hab/gomx.html

## **Conditions Report**

*Karenia brevis* (commonly known as Texas red tide) ranges from background to very low concentrations along the coast of Texas. No respiratory irritation is expected alongshore Texas Monday, August 21 through Monday, August 28. For local information check the Texas Parks and Wildlife Department Red Tide page

(https://tpwd.texas.gov/landwater/water/environconcerns/hab/redtide/).

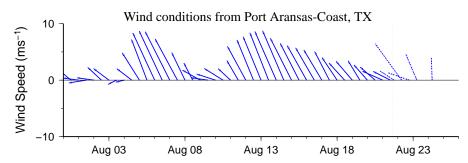
## **Analysis**

Sampling from Texas A&M University's Imaging FlowCytobot (IFCB), located on the Port Aransas ship channel, indicates that *Karenia brevis* concentrations range between 'background' and 'very low b' (TAMU; 8/14-8/21). For information on area shellfish restrictions, contact the Texas Department of State Health Services.

In recent MODIS Aqua ensemble imagery (8/20; shown left), elevated to high chlorophyll (2 to  $15 \mu g/L$ ) is visible alongshore from the Galveston Bay to the Rio Grande. However, elevated chlorophyll in this region is most likely due to the resuspension of benthic chlorophyll and sediments along the coast.

Forecast models based on predicted near-surface currents indicate a negligible potential transport from the Port Aransas region from August 20 to August 24.

Davis, Yang

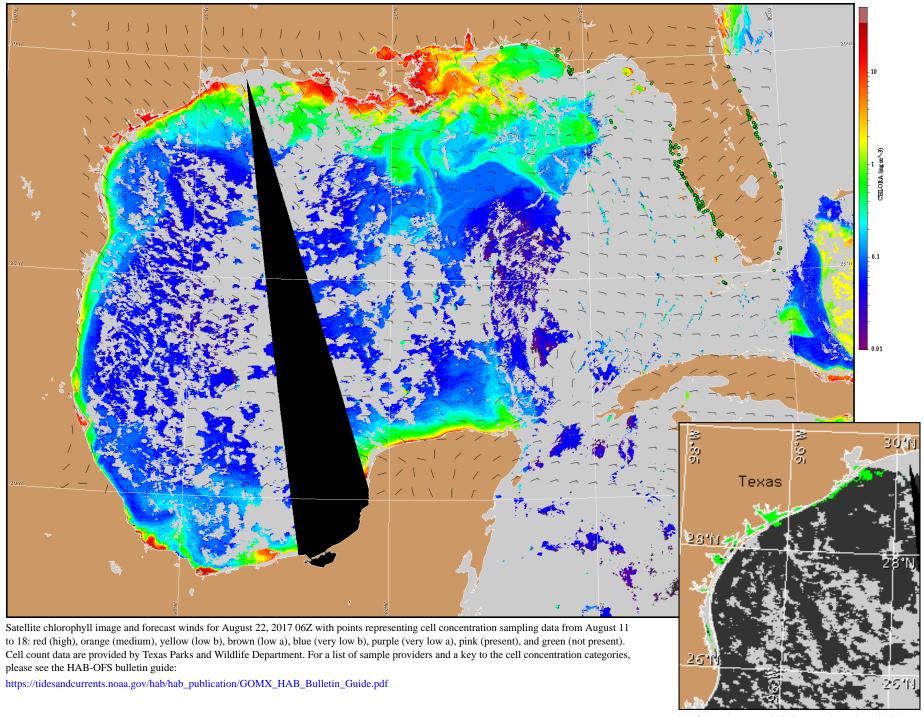


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

## Wind Analysis

**Port Aransas to Matagorda Ship Channel**: Southeast to east winds (5-15kn, 3-8m/s) today through Friday.

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the Gulf of Mexico HAB:



Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).